

C. REMARKS

The Examiner is thanked for the performance of a thorough search. By this amendment, Claims 4, 13, 22 and 31 have been canceled and Claims 1, 10, 19 and 28 have been amended. Hence, Claims 1-3, 5-12, 14-21, 23-30 and 32-36 are pending in this application. The amendments to the claims and the specification do not add any new matter to this application. All issues raised in the Office Action mailed March 31, 2005 are addressed hereinafter.

OBJECTION TO SPECIFICATION

The specification was objected to because the acronym “RLS” was not defined. The specification has been amended to clarify that the acronym RLS means recursive least squares. In view of the amendment to the specification made herein, reconsideration and withdrawal of the objection to the specification is respectfully requested.

ALLOWABILITY OF CLAIMS

The indicated allowability of Claims 6, 7, 15, 16, 24, 25, 33 and 34 is gratefully acknowledged. These claims have not been rewritten in independent form at this time however, because it is believed that all of the pending claims, as amended, are patentable over the references cited and relied upon for at least the reasons set forth hereinafter

REJECTION OF CLAIMS 1, 8-10, 17-19, 26 AND 27 UNDER 35 U.S.C. § 102(e)

Claims 1, 8-10, 17-19, 26 and 27 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Pare, Jr. et al.*, U.S. Patent No. 6,834,109 (hereinafter “*Pare*”). It is respectfully submitted that Claims 1, 8-10, 17-19, 26 and 27, as amended, are patentable over *Pare* for at least the reasons provided hereinafter.

CLAIM 1

Claim 1, as amended, is directed to a communications receiver that recites:

“a time domain equalizer;
a frequency domain equalizer; and
an update mechanism configured to update both the time domain equalizer and the frequency domain equalizer based upon performance data that indicates performance of a communications channel from which the communications receiver receives data, wherein updating the time domain equalizer includes determining a relative performance of the time domain equalizer operating with first and second sets of equalizer coefficients.”

It is respectfully submitted that the Claim 1 limitation “an update mechanism configured to update both the time domain equalizer and the frequency domain equalizer based upon performance data that indicates performance of a communications channel from which the communications receiver receives data, *wherein updating the time domain equalizer includes determining a relative performance of the time domain equalizer operating with first and second sets of equalizer coefficients*” (emphasis added) is not taught or suggested by *Pare* or any of the other cited references. The italicized portion of this Claim 1 limitation was added from dependent Claim 4. The Office Action asserted that this limitation was not taught or suggested by *Pare* and relied upon *Marchetto et al.*, U.S. Patent No. 5,513,215 (hereinafter “*Marchetto*”) for teaching this limitation.

The text at Col. 27, line 50 through Col. 28, line 2 of *Marchetto* describes a radio receiver apparatus that includes first and second feedback equalizers that each use a different set of coefficients. The radio receiver apparatus also includes an estimation means that selects the output of either the first or second feedback equalizer as being the most likely to correspond to the data transmitted to the radio receiver. There is no teaching or suggestion in *Marchetto* to use two different sets of equalizer coefficients with a single time domain equalizer and evaluate the

relative performance of the time domain equalizer while operating with the two different sets of equalizer coefficients. In *Marchetto*, each time domain equalizer uses a single set of coefficients. It is therefore respectfully submitted that the Claim 1 limitation “wherein updating the time domain equalizer includes determining a relative performance of the time domain equalizer operating with first and second sets of equalizer coefficients” is not taught or suggested by *Marchetto* and that Claim 1, as amended, is therefore patentable over *Pare* and *Marchetto*.

CLAIMS 8 AND 9

Claims 8 and 9 both depend from Claim 1 and include all of the limitations of Claim 1. It is therefore respectfully submitted that Claims 8 and 9 are patentable over *Pare* for at least the reasons set forth herein with respect to Claim 1. Furthermore, it is respectfully submitted that Claims 8 and 9 recite additional limitations that independently render them patentable over *Pare*.

CLAIMS 10, 17 AND 18

Claims 10, 17 and 18 recite limitations similar to Claims 1, 8 and 9, except in the context of an update mechanism. It is therefore respectfully submitted that Claims 10, 17 and 18 are patentable over *Pare* for at least the reasons set forth herein with respect to Claims 1, 8 and 9.

CLAIMS 19, 26 AND 27

Claims 19, 26 and 27 recite limitations similar to Claims 1, 8 and 9, except in the context of a method for configuring a communications receiver. It is therefore respectfully submitted that Claims 19, 26 and 27 are patentable over *Pare* for at least the reasons set forth herein with respect to Claims 1, 8 and 9.

In view of the foregoing, it is respectfully submitted that Claims 1, 8-10, 17-19, 26 and 27 are patentable over *Pare*. Accordingly, reconsideration and withdrawal of the rejection of

Claims 1, 8-10, 17-19, 26 and 27 under 35 U.S.C. § 102(e) as being anticipated by *Pare* is respectfully requested.

REJECTION OF CLAIMS 2-4, 11-13 and 20-22 UNDER 35 U.S.C. § 103(a)

Claims 2-4, 11-13 and 20-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pare* in view of *Marchetto*. This rejection is now moot with respect to canceled Claims 4, 13 and 22. It is respectfully submitted that Claims 2, 3, 11, 12, 20 and 21 are patentable over *Pare* and *Marchetto*, considered alone or in combination, for at least the reasons provided hereinafter.

Claims 2 and 3 depend from Claim 1 and include all of the limitations of Claim 1. As previously set forth herein, Claim 1, as amended, recites one or more limitations that are not taught or suggested by *Pare* or *Marchetto*. It is therefore respectfully submitted that Claims 2 and 3 are also patentable over *Pare* and *Marchetto*.

Claims 11 and 12 recite limitations similar to Claims 2 and 3, except in the context of an update mechanism. It is therefore respectfully submitted that Claims 11 and 12 are patentable over *Pare* and *Marchetto* for at least the reasons set forth herein with respect to Claims 2 and 3.

Claims 20 and 21 recite limitations similar to Claims 2 and 3, except in the context of a method for configuring a communications receiver. It is therefore respectfully submitted that Claims 20 and 21 are patentable over *Pare* and *Marchetto* for at least the reasons set forth herein with respect to Claims 2 and 3.

In view of the foregoing, it is respectfully submitted that Claims 2, 3, 11, 12, 20 and 21 are patentable over *Pare* and *Marchetto*. Accordingly, reconsideration and withdrawal of the rejection of Claims 2, 3, 11, 12, 20 and 21 under 35 U.S.C. § 103(a) as being unpatentable over *Pare* in view of *Marchetto* is respectfully requested.

REJECTION OF CLAIMS 5, 14 AND 23 UNDER 35 U.S.C. § 103(a)

Claims 5, 14 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pare* in view of *Marchetto* and further in view of *Roberts et al.*, U.S. Patent No. 6,418,558 (hereinafter “*Roberts*”). It is respectfully submitted that Claims 5, 14 and 23 are patentable over *Pare*, *Marchetto* and *Roberts*, considered alone or in combination, for at least the reasons provided hereinafter.

Claim 5 depends from Claim 1 and include all of the limitations of Claim 1. As previously set forth herein, Claim 1, as amended, recites one or more limitations that are not taught or suggested by *Pare* or *Marchetto*. It is also respectfully submitted that the limitation “an update mechanism configured to update both the time domain equalizer and the frequency domain equalizer based upon performance data that indicates performance of a communications channel from which the communications receiver receives data, wherein updating the time domain equalizer includes determining a relative performance of the time domain equalizer operating with first and second sets of equalizer coefficients” is also not taught or suggested by *Roberts* and that Claim 5 is also therefore patentable over *Pare*, *Marchetto* and *Roberts*.

Claims 14 and 23 recite limitations similar to Claim 5, except in the context of an update mechanism and a method for configuring a communications receiver, respectively. It is therefore respectfully submitted that Claims 14 and 23 are patentable over *Pare*, *Marchetto* and *Roberts* for at least the reasons set forth herein with respect to Claim 5.

In view of the foregoing, it is respectfully submitted that Claims 5, 14 and 23 are patentable over *Pare*, *Marchetto* and *Roberts*. Accordingly, reconsideration and withdrawal of the rejection of Claims 5, 14 and 23 under 35 U.S.C. § 103(a) as being unpatentable over *Pare* in view of *Marchetto* and further in view of *Roberts* is respectfully requested.

REJECTION OF CLAIMS 28, 35 AND 36 UNDER 35 U.S.C. § 103(a)

Claims 28, 35 and 36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pare* in view of *Roberts*. It is respectfully submitted that Claims 28, 35 and 36 are patentable over *Pare* and *Roberts*, considered alone or in combination, for at least the reasons provided hereinafter.

Claim 28, 35 and 36 recite limitations similar to Claims 1, 8 and 9, except in the context of a computer-readable medium for configuring a communications receiver. As previously set forth herein, Claim 1, as amended, recites one or more limitations that are not taught or suggested by *Pare* or *Roberts*.

In view of the foregoing, it is respectfully submitted that Claims 28, 35 and 36 are patentable over *Pare* and *Roberts*. Accordingly, reconsideration and withdrawal of the rejection of Claims 28, 35 and 36 under 35 U.S.C. § 103(a) as being unpatentable over *Pare* in view of *Roberts* is respectfully requested.

REJECTION OF CLAIMS 29-32 UNDER 35 U.S.C. § 103(a)

Claims 29-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pare* in view of *Roberts* and further in view of *Marchetto*. This rejection is now moot with respect to canceled Claim 31. It is respectfully submitted that Claims 29, 30 and 32 are patentable over *Pare*, *Roberts* and *Marchetto*, considered alone or in combination, for at least the reasons provided hereinafter.

Claims 29, 30 and 32 all depend from Claim 28 that recites limitations similar to Claim 1, except in the context of a computer-readable medium for configuring a communications receiver. As previously set forth herein, Claim 1, as amended, recites one or more limitations that are not taught or suggested by *Pare*, *Roberts* or *Marchetto*. It is therefore respectfully submitted that

Claims 29, 30 and 32 are patentable over *Pare*, *Roberts* and *Marchetto* for at least the reasons set forth herein with respect to Claim 5.

In view of the foregoing, it is respectfully submitted that Claims 29, 30 and 32 are patentable over *Pare*, *Roberts* and *Marchetto*. Accordingly, reconsideration and withdrawal of the rejection of Claims 29, 30 and 32 under 35 U.S.C. § 103(a) as being unpatentable over *Pare* in view of *Roberts* and further in view of *Marchetto* is respectfully requested.

CONCLUSION

It is respectfully submitted that all of the pending claims are in condition for allowance and the issuance of a notice of allowance is respectfully requested. If there are any additional charges, please charge them to Deposit Account No. 50-1302.

The Examiner is invited to contact the undersigned by telephone if the Examiner believes that such contact would be helpful in furthering the prosecution of this application.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP



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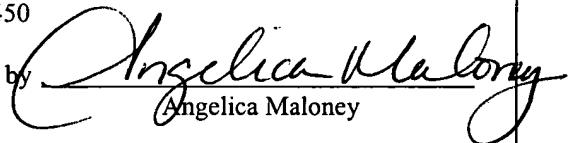
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on August 30, 2005

by



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